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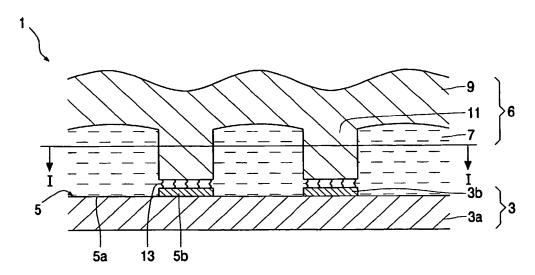
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(54) Title: STRATIFIED-PHASE-SEPARATED COMPOSITE COMPRISING A POLYMER AND A LIQUID, AND METHOD OF MANUFACTURING THE SAME



(57) Abstract: A polymeric stratified-phase-separated composite (6) which is mechanically robust and simple to manufacture comprises a film of liquid (7), a layer of polymerized material (9) covering the thin film of liquid and supporting members (11) formed of polymerized material and extending from the layer of polymerized material through the thin film of liquid. The supporting members extend onto selected first regions (5b) of a substrate surface (5). The substrate surface has, laid our in accordance with a predetermined pattern, selected first (5b) and second (5a) regions. The first are functionalized for selective accumulation of the liquid. In one embodiment the first and second regions are regions of high and low affinity for polymerizable material respectively. In another, a difference in rate of polymerization is induced by using for example different concentrations of polymerization inhibitor in the first and second regions.

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